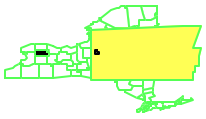
LEHIGH VALLEY RAILROAD DERAILMENT SITE

NEW YORK

EPA ID# NYD986950251

EPA REGION 2
CONGRESSIONAL DIST. 27
Genesee County
LeRoy



Site Description

The Site in the town of LeRoy, Genesee County, New York is the location of a chemical spill that resulted from a 1970 train derailment. The Site consists of portions of Gulf Road, the former railroad bed, and the properties adjacent to the crossing. The Site is in a rural setting, and the surrounding area is used for residential, recreational, and commercial purposes. An intermittent stream, Mud Creek, is located approximately 500 feet to the southeast.

The derailment occurred at approximately 3:30 a.m. on Sunday, December 6, 1970. Approximately one ton of cyanide crystals spilled onto the ground. The cleanup included the removal of the crystals and the overturned car. After the crystals were removed, neutralizers were spread on the ground to counteract the effects of any remaining cyanide. Trichloroethene (TCE) was also released from two ruptured tank cars.

A Genesee County Health Department (GCHD) engineer who was among the first people to respond to the accident and a claims agent for Lehigh Valley Railroad each reported in February 1971 that approximately 35,000 gallons of TCE had been spilled. A geologist hired by Lehigh Valley Railroad to investigate pollution resulting from the spill reported in March 1971 that approximately 30,000 gallons of TCE were spilled. TCE odors were noticed eight days after the derailment in the basement of the Knickerbocker Hotel, which was located 200 feet north of the crossing.

Site Responsibility: The Site is being addressed through Federal and State actions.

NPL LISTING HISTORY
Proposed Date: 07/28/98
Final Date: 01/19/99

Threats and Contaminants

The Lehigh Valley Railroad tried to alleviate the odors by flushing the chemical out of the surrounding fill sometime between March and June 1971. The response action involved digging trenches near the crossing, pumping approximately one million gallons of water from a nearby quarry into the trenches, and allowing the water to percolate into the ground. The owners of two private wells located along Gulf Road east of the Site noticed TCE in their water supplies about a week after the spill. By November 1971, seven wells had become contaminated. The Lehigh Valley Railroad provided drinking water to residents with contaminated wells beginning in June 1971, and later provided the installation and maintenance of charcoal-filtering systems at the affected wells.

Further sampling of private wells by New York State Department of Health (NYSDOH), U.S. Environmental Protection Agency (EPA), and New York State Department of Environmental Conservation (NYSDEC) between 1990 and 1994 detected TCE in approximately 50 wells located east or southeast of the Site.

The total population served by private ground-water wells within four miles of the Site is approximately 2,515. The bedrock aquifer is the only significant source of ground water for private wells in the Site's vicinity. The bedrock aquifer is not used for public water supplies within four miles of the Site. The nearest public supply wells are located in the Village of Caledonia more than four miles east of the Site.

Cleanup Approach

The Site is being addressed in two phases: immediate actions and a long-term remedial phase focusing on cleanup of the entire Site.

Response Action Status

Immediate Action: In December 1991, the EPA installed granular-activated carbon (GAC) water-treatment systems at 37 locations where TCE exceeded 5 micrograms per liter (ug/L), the Maximum Contaminant Level (MCL). In October 1994, the NYSDEC installed an additional GAC system at a residence exceeding the MCL.

Entire Site: The NYSDEC completed a Remedial Investigation and Feasibility Study (RI/FS) in 1997 that included a soil-gas survey, soil sampling, and a hydrogeologic investigation. The results of soil sampling conducted in September 1992, December 1992, and

October 1994, showed TCE concentrations ranging from 46 to 570,000 micrograms per kilogram (ug/kg). The hydrogeologic investigation showed that there is a source of TCE contamination remaining in the unsaturated soil and bedrock at the spill site, and a ground-water plume extending almost four miles east and southeast of the Site.

The NYSDEC issued a Record of Decision (ROD) for the Site in March 1997. The NYSDEC selected ex-situ soil vapor-extraction and bedrock vapor-extraction as source-control measures. A water-line extension was selected to provide a safe, potable water supply to all affected residents and businesses. The EPA has assumed responsibility for the design and implementation of the source-control remedies The EPA is in the process of initiating an additional RI/FS aimed at addressing the TCE contamination remaining in the soil.

Cleanup Progress

The design of the waterline was completed and the contract was awarded in December 2001. The construction of the waterline was completed in July 2003.

The EPA has initiated work on the remedial designs for the two source-control remedies as well as a remedial investigation for the ground-water remediation.

Site Repository

U.S. Environmental Protection Agency
Public Information Office
Carborundum Center - Suite 530
345 Third Street
Niagara Falls, New York 14303